BERNEIL WASH
FCD GAGE ID# 4688

STATION DESCRIPTION

LOCATION – The gage is located two blocks south of Doubletree Road at the approximate 66th Street alignment, in the town of Paradise Valley. Access is gained from 66th Place from a service road on the south side of the first house on the southwest corner of Doubletree and 66th Place. Latitude N 33° 33' 59"; Longitude W 111° 56' 16". Located in the NE1/4 NW1/4 of S34 T3N R4E of the Paradise Valley 7.5-minute USGS quadrangle.

DRAINAGE AREA – about 8.3 square miles

ESTABLISHED – July 30, 1998

GAGE – The gage is a pressure transducer type located on the left bank of the channel. The PT is at 0.00 feet gage height.

There are no staff or crest stage gages at this site.

ZERO GAGE HEIGHT – Zero gage height is the elevation of the PT. Elevation is 1,314.64 feet NAVD 1988.

HISTORY – None

REFERENCE MARKS –

RM-BERNEIL is an FCD brass cap located close to the gage standpipe. The RM was established on February 2, 2000. Elevation 1,323.303 feet NAVD 1988, levels of March 12, 2001, or 8.66 feet gage height, levels of February 2, 2000. Northing 933562.741 feet; Easting 693266.564 feet. The brass cap was found laying on the bank in 2010, perhaps from grading of the service road. Thus, RM-BERNEIL is destroyed.

RP1 – East side of top of standpipe door awning. Gage height = 10.42 feet, levels of February 2, 2000.

RP2 - Ground at PT on toe of left bank. Gage height = -0.05 feet, levels of February 2, 2000.

CHANNEL AND CONTROL – The channel is a gunnite lined trapezoidal channel of relative uniformity. The channel is the control for all stages.

RATING – Rating #1 developed from design information and surveyed information. TWL used the design and HEC-RAS results to create the rating.

DISCHARGE MEASUREMENTS – None made to date. Low flow measurements could be made by wading the channel. High flows are not feasible at the Doubletree Road bridge because of energy dissipaters at the bridge.

POINT OF ZERO FLOW - Approximately 0.00 feet gage height. The channel bottom is sprayed concrete and is not smooth. The PZF could vary by 0.05 feet or so.

FLOODS – Peak flood was 1,120 cfs and 2.88 feet gage height on August 24, 2006. Previous peak occurred August 2, 2005, at 567 cfs, and 1.98 feet gage height.

REGULATION - None known

DIVERSIONS - None known

ACCURACY – Fair

JUSTIFICATION – Monitor flows into Indian Bend Wash for flood warning in the city of Scottsdale.

UPDATED – July 13, 2011
DE Gardner